REMARKS

Applicant respectfully requests reconsideration of the present application in view of the reasons that follow. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. Claims 1-20 remain pending in this application.

2.   §102 Rejection

In Section 2 of the Office Action, the Examiner maintained the earlier rejection of claims 1,2, 6-8, 12-16, and 20 under 35 USC §102(b) as being anticipated by U.S. Patent No. 6,182,261 to Haller et al. (hereinafter Haller). The Examiner stated that:

> "Haller teaching broadly encompasses the claimed invention.
> Haller teaches using a LLR Probability value to determine the
> number of iterations for an iterative decoding process. The
> Examiner would like to point out that one of Haller objectives is to
> determine the number of decoding iterations Haller states it is a
> **further objective of some aspect of the present invention to**
> **provide an efficient method for determining how many**
> **iterations are needed for reliable decoding of a packet"**

(emphasis Examiner's) Applicants respectfully traverse the Examiner's rejection.

Claims 1 recites "a processor configured to determine an efficient number of iterations for an iterative decoder based on the data throughput value." Claim 7 recites "determining a number of iterations to be performed by an iterative decoder based on the data throughput value." Claim 13 recites "a processor configured to determine a data throughput value and determine the number of iterations to be performed by the iterative decoder based on the data throughput value and further configured to control the number of iterations performed by the iterative decoder based on the determination." Data throughput value is described in the present application as "a value representative of the amount of data currently being received and already received but not processed at receiving module 150." (Application, [0030]). Applicants assert that these limitations are not taught or suggested by Haller.

-5-   Application No. 10/667,700

The Examiner appears to be asserting that the LLR probability ratio of Haller is a data throughput value, stating that "the claimed data throughput value is not novel since Haller teaches using a LLR probability value to determine a decoding iteration. Applicants assert that an LLR probability value of Haller is not a data throughput value. The LLR probability and its use is described in Haller, stating

> After the predetermined number of initial iterations have been performed, decoder 70 and/or control unit 88 determines the minimal absolute value of the LLR probability values L of the bits in the packet, $min(|L|)$, i.e., the LLR probability value among all of the bits in the packet that is closest to zero. (As noted hereinabove, the bit probabilities are measured in the log domain on a scale of - 32 to 31, with the extrema of the scale corresponding to high probabilities of a one or a zero, respectively.) The minimal LLR probability represents a level of confidence that the LLR probability represents the correct hard bit value. Therefore, if the minimal LLR probability value is not above a predetermined absolute probability threshold, the decoding process continues. However, if the minimal LLR probability value is above the predetermined threshold, the CRC of the packet is preferably verified, and the decoding of the packet is terminated if the CRC is correct.

Accordingly, the LLR probability value is used for error checking and not to measure data throughput. In contrast, data throughput value is described in the present application as "a value representative of the amount of data currently being received and already received but not processed at receiving module 150." (Application, [0030]). The Examiner appears to be broadly interpreting this limitation f claims 1, 7, and 13 independent of its use in the claims and the application. A data throughput value is not a LLR probability value as used in Haller and this limitation is not taught nor suggested by Haller.

Yet further, the objective of Haller, cited and emphasized by the Examiner, is unrelated to the objective of the present application. The present application states that "the maximum number of iteration performed using the method increases while the number of data packets stored in data packet queue 220 is low and decreases while the number of data packets stored in

-6-   Application No. 10/667,700

data packet queue 220 is high. Advantageously, using the method described above provides a balance between high error detection and correction and high throughput." (Application, [0045]) In contrast, Haller functions to provide an efficient method for determining how many iterations are needed for reliable decoding of a packet *independent of the current throughput*. Accordingly, interpreting LLR probability value as used in Haller as a data throughput value would be in conflict with the teachings of Haller..

Accordingly, each and every element of claims 1, 7, and 13 are neither taught nor suggested by Haller. Reconsideration and withdrawal of the rejection of claims 1, 7, and 13 is respectfully requested.

Claims 2 and 6 depend from claim 1 and include all of the limitations thereof. Claims 8 and 12 depend from claim 7 and include all of the limitations thereof. Claims 14-16 and 20 depend from claim 13 and include all of the limitations thereof. These claims are allowable for at least the same reasons as the independent claims from which they depend. Reconsideration and allowance of claims 2, 6, 8, 12, 14-16, and 20 is respectfully requested.

3.   §103 Rejection

In section 3 of the Office Action, the Examiner maintained the earlier rejection of claims 3-5, 9-11, and 17-19 under 35 USC §103(a) as being unpatentable over Haller in view of U.S. Patent No. 6, 233,709 to Zhang et al. (hereinafter Zhang). The Examiner disagreed with the Applicants arguments that Zhang does not cure the deficiencies of Haller for the reasons stated above.

However, as stated above, claims 1, 7, and 13 recite determining a number of iterations based on a data throughput value. Determining the number of iterations based on a bit error rate is not determining a number of iterations based on a data throughput value. Accordingly, Zhang does not cure the deficiencies noted above with reference to claims 1, 7, and 13.

-7-   Application No. 10/667,700

Atty. Dkt. No. 03CR156/KE

Claims 3-5 depend from claim 1 and include all of the limitations thereof. Claims 9-11 depend from claim 7 and include all of the limitations thereof. Claims 17-19 depend from claim 13 and include all of the limitations thereof. These claims are allowable for at least the same reasons as the independent claims from which they depend. Reconsideration and allowance of claims 3-5, 9-11, and 17-19 is respectfully requested.

4.   Conclusion

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 18-1722. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 18-1722.

Respectfully submitted,

Date _November 17, 2006_   By _Kyle Eppele_

ROCKWELL COLLINS, INC.   Kyle Eppele
400 Collins Road, NE   Attorney for Applicants
M/S 124-323   Registration No. 34,155
Cedar Rapids, IA 52498
Telephone: (319) 295-8280
Facsimile: (319) 295-8777
Customer No. 26383

-8-   Application No. 10/667,700

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